

In the claims:

Please amend the claims as follows:

(original) 1. An external cavity tunable laser comprising:
a frequency-tuning device configured as an Acousto-optical cell including a first and a second Acousto-optical diffraction means having a narrow-band optical filtering Bragg grating;
and
an etalon having spectral characteristics for cooperating with said frequency-tuning device to increase a side-mode suppression ratio of said tunable laser.

(currently amended) 2. The external cavity tunable laser of claim 1 wherein:
said etalon having a ~~fineness~~ finesse greater than or equal to 10.

(original) 3. The external cavity tunable laser of claim 1 wherein:
said etalon is spectrally aligned with a telecommunication ITU grid.

(original) 4. The external cavity tunable laser of claim 1 wherein:
said etalon is disposed immediately before said frequency

tuning device along an optical path of said tunable laser.

(original) 5. The external cavity tunable laser of claim 1 wherein:
said etalon is disposed immediately after said frequency
tuning device along an optical path of said tunable laser.

(original) 6. The external cavity tunable laser of claim 1 wherein:
said first Acousto-optical diffraction means comprising a
first Acousto-optical crystal and said second Acousto-optical
diffraction means comprising a second Acousto-optical
crystal.

(original) 7. The external cavity tunable laser of claim 1 further
comprising:
a reflection mirror driven by a PZT assembly to reflect a
beam projected from said Acousto-optical cell back to
transmit therethrough again.

(original) 8. The external cavity tunable laser of claim 1 further
comprising:
a first electrode connected to said first Acousto-optical
diffraction means and a second electrode connected to said

second Acousto-optical diffraction means.

(original) 9. The external cavity tunable laser of claim 1 wherein:
said first and second Acousto-optical diffraction means
having diffraction phase gratings for intra-cavity narrowband
wavelength filtering.

(original) 10. The external cavity tunable laser of claim 8 wherein:
said first electrode is connected to an RF signal for tuning a
central frequency of said narrow band Bragg grating.

(original) 11. The external cavity tunable laser of claim 8 wherein:
said second electrode is connected to a second electric source
to provide a second order filtering for compensating a
wavelength shift.

(original) 12. The external cavity tunable laser of claim 1 further
comprising:
a collimated laser source for projecting a collimated optical
signal of specific wavelength through said Acousto-optical
cell.

(original) 13. The external cavity tunable laser of claim 1 wherein:
said first and second Acousto-optical diffraction means are
formed as a first column and a second column respectively
in a single Acousto-optical crystal.

(original) 14. The external cavity tunable laser of claim 1 wherein:
said first and second Acousto-optical diffraction means are
formed as a first column and a second column respectively
in a Lithium Niobate (LiNbO_3) crystal.

(original) 15. The external cavity tunable laser of claim 1 wherein:
said first and second Acousto-optical diffraction means are
formed as a first column and a second column respectively
in a Tellurium Dioxide (TeO_2) crystal.

(original) 16. The external cavity tunable laser of claim 1 wherein:
said first and second Acousto-optical diffraction means are
formed as a first column and a second column respectively
in a birefringent crystal having a predefined responsiveness
to an radio-frequency (RF) driven signal.

(original) 17. The external cavity tunable laser of claim 1 wherein:

said first and a second Acousto-optical diffraction means
having said narrow-band optical filtering Bragg grating
further comprising a surface acoustic wave (SAW) grating.

(cancelled) 18.

(currently amended) 19. An external cavity tunable laser comprising:
a frequency-tuning device configured as an Acousto-optical
cell and a reflection means for forward and backward
transmitting an optical beam through said Acousto-optical
cell for generating an optical beam with zero-wavelength
shift and at least twice filtered by said Acousto-optical cell;
and
an etalon for cooperating with said frequency-tuning device
to increase a side-mode-suppression-ratio of said tunable
laser

~~The external cavity tunable laser of claim 18 wherein:~~

said etalon having a fineness finesse greater than or equal to 10.

(currently amended) 20. The external cavity tunable laser of claim
~~18~~19 wherein:

said etalon is spectrally aligned with a telecommunication

ITU grid.

(cancelled) 21.

(currently amended) 22. The external cavity tunable laser of claim

~~18~~19 wherein:

said etalon is disposed immediately after said frequency
tuning device along an optical path of said tunable laser.

(currently amended) ~~24~~23. The external cavity tunable laser of claim

~~18~~19 wherein:

said Acousto-optical cell further comprising a first and a
second Acousto-optical crystal.

(currently amended) ~~25~~24. The external cavity tunable laser of claim

~~24~~23 wherein:

said Acousto-optical cell further comprising a first and a
second Acousto-optical diffraction means disposed in an
Acousto-optical crystal.

(currently amended) ~~26~~25. The external cavity tunable laser of claim

~~24~~23 wherein:

said Acousto-optical cell further comprising a first and a second Acousto-optical diffraction columns respectively disposed in an Acousto-optical crystal.

(currently amended) ~~27~~26. The external cavity tunable laser of claim ~~2423~~ wherein:

said first and second Acousto-optical cells are formed as a first column and a second column respectively in a birefringent crystal having a predefined responsiveness to an radio-frequency (RF) driven signal.

(currently amended) ~~28~~27. The external cavity tunable laser of claim ~~2423~~ wherein:

said first and a second Acousto-optical cells having said narrow-band optical filtering Bragg grating further comprising a surface acoustic wave (SAW) grating.

(currently amended) ~~29~~28. An external cavity tunable laser comprising:

a frequency-tuning device configured as a non-collinear Acousto-optical cell having an acoustic wave propagates almost perpendicular to an optical transmission

therethrough; and

an etalon cooperating with said frequency-tuning device for increasing a side-mode-suppression-ratio of said tunable laser.

(currently amended) ~~30~~29. A method for tuning a laser comprising: tuning said laser by a frequency-tuning device configured as a non-collinear Acousto-optical cell having an acoustic wave propagates almost perpendicular to an optical transmission therethrough; and employing an etalon of a specific fineness to cooperate with said frequency-tuning device for outputting an optical signal with an increased a side-mode-suppression-ratio (SMSR).

(currently amended) ~~31~~30. The method for tuning a laser of claim ~~30~~29 further comprising: forming said frequency-tuning device as a first and a second Acousto-optical diffraction cells and employing said etalon with a ~~fineness~~ finesse equal to or greater than 10.